

Natural Drainage Systems
Landscape Maintenance Categories (LMC) and Characteristics Checklist

Items for reporting in bold

Project Sites

- | | |
|--|--|
| <input type="checkbox"/> Carkeek Cascade at NW 110th | <input type="checkbox"/> Broadview Green Grid - SEA Streets |
| <input type="checkbox"/> Broadview Green Grid - Carkeek Cascades at NW107th | <input type="checkbox"/> Phinney Ave N SEA Street |
| <input type="checkbox"/> Pinehurst Green Grid | <input type="checkbox"/> Palatine Ave N SEA Street |
| <input type="checkbox"/> 19th Avenue NE | <input type="checkbox"/> 1st Ave NW SEA Street |
| <input type="checkbox"/> 20th Avenue NE | <input type="checkbox"/> 2nd Ave NW SEA Street |
| <input type="checkbox"/> 23rd Avenue NE | <input type="checkbox"/> SEA Streets #1 |
| <input type="checkbox"/> NE 117th Street | <input type="checkbox"/> Viewlands Cascade |
| <input type="checkbox"/> NE 113th Street | |
| <input type="checkbox"/> 25th Ave NE | |

		Maintenance Category A (Excellent)	Maintenance Category B (Good)	Maintenance Category C (Moderate)	Maintenance Category D (Low)
NDS Element					
Aesthetics (vegetation & trash)	All				
		<input type="checkbox"/> At least 90% of planted vegetation is healthy, dense, and attractive	<input type="checkbox"/> At least 75% of planted vegetation is healthy with a generally good appearance	<input type="checkbox"/> Between 40-75% of planted vegetation is healthy with a generally good appearance	<input type="checkbox"/> Less than 40% of planted vegetation is healthy and has a generally good appearance
		<input type="checkbox"/> Less than 10% of the vegetation are weeds, unless on edge and provided erosion control	<input type="checkbox"/> Less than 25% of the vegetation are weeds, unless on edge and providing erosion control	<input type="checkbox"/> Between 60-25% of the vegetation are weeds, unless on edge and providing erosion control	<input type="checkbox"/> Greater than 60% of the vegetation are weeds
		<input type="checkbox"/> Zero tolerance for noxious weeds	<input type="checkbox"/> Goal of zero tolerance for noxious weeds	<input type="checkbox"/> Control noxious weeds	<input type="checkbox"/> Control noxious weeds
		<input type="checkbox"/> Clean, distinct edges	<input type="checkbox"/> Loose edges: grass starting to encroach on swale or vice versa, plants starting to hang over street/sidewalk	<input type="checkbox"/> Loose edges: grass encroaching on swale or vice versa, plant hanging over street/sidewalk	<input type="checkbox"/> No edges; surrounding vegetation spills into swale or vice versa
		<input type="checkbox"/> Mulch covers 100% of swale and is at least 4" deep	<input type="checkbox"/> Mulch covers at least 90% of swale and is at least 4" deep	<input type="checkbox"/> Mulch covers at least 60% of swale and is at least 4" deep	<input type="checkbox"/> Mulch covers less than 60% of swale
		<input type="checkbox"/> No bare spots	<input type="checkbox"/> Less than 10% bare spots	<input type="checkbox"/> Less than 40% bare spots	<input type="checkbox"/> More than 40% bare spots
		<input type="checkbox"/> No evidence of erosion (stabilized surfaces)	<input type="checkbox"/> A few areas of potential erosion	<input type="checkbox"/> Some areas of erosion	<input type="checkbox"/> Substantial eroded areas
		<input type="checkbox"/> Homeowner is fully maintaining (where applicable)	<input type="checkbox"/> Homeowner is providing some maintenance (where applicable)	<input type="checkbox"/> Homeowner is providing low level of maintenance (where applicable)	<input type="checkbox"/> Homeowner is not maintaining swale (where applicable)
				Able to achieve Level B without complete retrofit	<input type="checkbox"/> Unable to achieve higher service levels without complete retrofit
Consideration for Noxious Weeds		Zero tolerance for Class A and Class B noxious weeds. Goal of zero tolerance for Class C noxious weeds.	Zero tolerance for Class A noxious weeds. Goal of zero tolerance for Class C noxious weeds.	Zero tolerance for Class A noxious weeds. Class B and Class C noxious weeds are controlled.	Zero tolerance for Class A noxious weeds. Class B and Class C noxious weeds are controlled.
		King County Noxious Weed List			

System Type					
Bioretention (vegetation & soils/substrate)	SEA Streets (2 nd Ave NW from NW 117 th St to NW 120 th St)				
	SEA Streets (2 nd Ave NW from NW 117 th St to NW 120 th St)				
	BGG SEA Streets (Phinney Ave N, Palatine Ave N, 1 st Ave NW, 2 nd Ave NW from NW 110 th St to NW 107 th St)				
	Pinehurst (19 th Ave NE from NE 115 th St to NE 117 th St, 20 th Ave NE and 23 rd Ave NE from NE 113 th St to NE 117 th St, NE 113 th St from 20 th Ave NE and 23 rd Ave NE)				
		<input type="checkbox"/> At least 90% of swale bottom is covered with healthy, wetland vegetation	<input type="checkbox"/> At least 75% of swale bottom is covered with healthy, wetland vegetation	<input type="checkbox"/> Between 40-75% of swale bottom is covered with healthy, wetland vegetation	<input type="checkbox"/> Less than 40% of swale bottom is covered with healthy, wetland vegetation
		<input type="checkbox"/> Bottom soil is well aerated, less than 10% compaction	<input type="checkbox"/> Bottom soil is well aerated, less than 20% compaction	<input type="checkbox"/> Less than 40% compaction	<input type="checkbox"/> More than 40% compaction
		<input type="checkbox"/> No erosion, channelization or scouring	<input type="checkbox"/> No erosion, channelization or scouring	<input type="checkbox"/> Some erosion, channelization or scouring	<input type="checkbox"/> Erosion, channelization or scouring
Biofiltration (vegetation & soils/substrate)		<input type="checkbox"/> Less than 10% bare spots	<input type="checkbox"/> Less than 25% bare spots	<input type="checkbox"/> Less than 40% bare spots	<input type="checkbox"/> Greater than 40% bare spots
		<input type="checkbox"/> Acceptable level of sediment or debris accumulation – 2 inches, unless otherwise noted or accumulation prevents achievement of previous bullet	<input type="checkbox"/> Acceptable level of sediment or debris accumulation – 2 inches, otherwise noted or accumulation prevents achievement of previous bullet	<input type="checkbox"/> Less than 40% bare spots	<input type="checkbox"/> Significant build up of sediment or debris – greater than 3 inches, unless otherwise noted
				<input type="checkbox"/> Moderate level of sediment or debris accumulation – 3 inches, unless otherwise noted or accumulation prevents achievement of previous bullet	
this value is equal to 3 x design flow depth and will vary with each project		<input type="checkbox"/> At least 90% of swale bottom covered with healthy, uniformed fine-stemmed vegetation at least XX inches high	<input type="checkbox"/> At least 80% of swale bottom covered with healthy, uniformed fine-stemmed vegetation at least XX* inches high	<input type="checkbox"/> Between 60-80% of swale bottom covered with healthy, uniformed fine-stemmed vegetation at least XX* inches high	<input type="checkbox"/> Less than 60% of swale bottom covered with healthy, uniformed fine-stemmed vegetation, of at least XX* inches high
		<input type="checkbox"/> No erosion, channelization or scouring	<input type="checkbox"/> No erosion, channelization or scouring	<input type="checkbox"/> Some erosion, channelization or scouring	<input type="checkbox"/> Erosion, channelization or scouring
		<input type="checkbox"/> Less than 10% bare spots	<input type="checkbox"/> Less than 20% bare spots	<input type="checkbox"/> Less than 40% bare spots	<input type="checkbox"/> Greater than 40% bare spots

		<input type="checkbox"/> Acceptable level of sediment or debris accumulation – 2 inches, unless otherwise noted or accumulation prevents achievement of previous bullet	<input type="checkbox"/> Acceptable level of sediment or debris accumulation – 2 inches, unless otherwise noted or accumulation prevents achievement of previous bullet	<input type="checkbox"/> Acceptable level of sediment or debris accumulation – 3 inches, unless otherwise noted or accumulation prevents achievement of previous bullet	<input type="checkbox"/> Acceptable level of sediment or debris accumulation – greater than 3 inches, unless otherwise noted
Bioretention with Biofiltration (vegetation & soils/substrate) *this value is equal to 3 x design flow depth and will vary with each project	Which ones?				
		<input type="checkbox"/> At least 90% of swale bottom is covered with healthy, uniformed fine-stemmed wetland vegetation at least XX* inches high	<input type="checkbox"/> At least 80% of swale bottom is covered with healthy, uniformed fine-stemmed wetland vegetation at least XX* inches high	<input type="checkbox"/> Between 40-80% of swale bottom is covered with healthy, uniformed fine-stemmed wetland vegetation at least XX* inches high	<input type="checkbox"/> Less than 40% of swale bottom is covered with healthy, uniformed fine-stemmed wetland vegetation at least XX* inches high
		<input type="checkbox"/> Bottom soil is well aerated, less than 10% compaction	<input type="checkbox"/> Bottom soil is well aerated, less than 20% compaction	<input type="checkbox"/> Less than 40% compaction	<input type="checkbox"/> More than 40% compaction
		<input type="checkbox"/> No erosion, channelization or scouring	<input type="checkbox"/> No erosion, channelization or scouring	<input type="checkbox"/> Some erosion, channelization or scouring	<input type="checkbox"/> Erosion, channelization or scouring
		<input type="checkbox"/> Less than 10% bare spots	<input type="checkbox"/> Less than 25% bare spots	<input type="checkbox"/> Less than 40% bare spots	<input type="checkbox"/> Greater than 40% bare spots
		<input type="checkbox"/> Acceptable level of sediment or debris accumulation – 2 inches, unless otherwise noted or accumulation prevents achievement of previous bullet	<input type="checkbox"/> Acceptable level of sediment or debris accumulation – 2 inches, otherwise noted or accumulation prevents achievement of previous bullet	<input type="checkbox"/> Less than 40% bare spots	<input type="checkbox"/> Significant build up of sediment or debris – greater than 3 inches, unless otherwise noted
				<input type="checkbox"/> Moderate level of sediment or debris accumulation – 3 inches, unless otherwise noted or accumulation prevents achievement of previous bullet	

Conveyance (vegetation & soils/substrate)		<input type="checkbox"/> At least 90% of swale bottom is covered with healthy vegetation	<input type="checkbox"/> At least 75% of swale bottom is covered with healthy, wetland vegetation	<input type="checkbox"/> Between 40-75% of swale bottom is covered with healthy, wetland vegetation	<input type="checkbox"/> Less than 40% of swale bottom is covered with healthy, wetland vegetation
		<input type="checkbox"/> No erosion, channelization or scouring	<input type="checkbox"/> No erosion, channelization or scouring	<input type="checkbox"/> Some erosion, channelization or scouring	<input type="checkbox"/> Erosion, channelization or scouring
		<input type="checkbox"/> Less than 10% bare spots	<input type="checkbox"/> Less than 25% bare spots	<input type="checkbox"/> Less than 40% bare spots	<input type="checkbox"/> Greater than 40% bare spots
		<input type="checkbox"/> Acceptable level of sediment or debris accumulation – 2 inches, unless otherwise noted or accumulation prevents achievement of previous bullet	<input type="checkbox"/> Acceptable level of sediment or debris accumulation – 2 inches, unless otherwise noted or accumulation prevents achievement of previous bullet	<input type="checkbox"/> Less than 40% bare spots	<input type="checkbox"/> Significant build up of sediment or debris – greater than 3 inches, unless otherwise noted
		<input type="checkbox"/> No non-designed obstructions to flow	<input type="checkbox"/> Minimal non-designed obstructions to flow (over-grown vegetation, trash rack blockages)	<input type="checkbox"/> Moderate level of sediment or debris accumulation – 3 inches, unless otherwise noted or accumulation prevents achievement of previous bullet	<input type="checkbox"/> Significant non-designed obstructions to flow (over-grown vegetation, trash rack blockage)
				<input type="checkbox"/> Several non-designed obstructions to flow (over-grown vegetation, trash rack blockages)	
Other Structures	All				
Weir walls, check dams, and log weirs			<input type="checkbox"/> Weir walls, check dams and log weirs are stable and secure	<input type="checkbox"/> Minimal erosion and/or undercutting around weir walls, check dams and log weirs	<input type="checkbox"/> Moderate erosion and/or undercutting around weir walls, check dams, and log weirs
Rockery, boulders, manufactured block sidewalls, soil-wrapped green walls			<input type="checkbox"/> Acceptable level of sediment or debris accumulation behind weir walls, check dams or log weirs – 2 inches, unless otherwise noted	<input type="checkbox"/> Moderate level of sediment or debris accumulation behind weir walls, check dams or log weirs – 3 inches, unless otherwise noted	<input type="checkbox"/> Significant level of sediment or debris accumulation behind weir walls, check dams or log weirs – greater than 3 inches, unless otherwise noted

			<input type="checkbox"/> Rockery, boulders, and walls are stable and secure	<input type="checkbox"/> 10 % of the rocks or boulders are loose; 10 % of walls have areas of erosion or lack vegetation	<input type="checkbox"/> 30 % of the rocks or boulders are loose; 30 % of walls have areas of erosion or lack vegetation
			<input type="checkbox"/> No erosion or undercutting visible around rockery, boulders or walls	<input type="checkbox"/> Minimal erosion or undercutting visible around rockery, boulders or walls	<input type="checkbox"/> Moderate erosion or undercutting visible around rockery, boulders or walls
Safety, mobility, access	All	<input type="checkbox"/> Vegetation causes no visibility (line	<input type="checkbox"/> Vegetation causes minimal visibility (line of sight) or driver safety issues	<input type="checkbox"/> Vegetation causes moderate visibility (line of sight) or driver safety issues	<input type="checkbox"/> Vegetation causes significant visibility (line of sight) or driver safety issues
		<input type="checkbox"/> of sight) or driver safety issues	<input type="checkbox"/> Infrastructure access is 20% blocked	<input type="checkbox"/> Infrastructure is 50% blocked	<input type="checkbox"/> Infrastructure is not accessible
		<input type="checkbox"/> Infrastructure is accessible	<input type="checkbox"/> 80% of vegetation around infrastructure is maintained at height to prevent damage during routine maintenance	<input type="checkbox"/> 60% of vegetation around infrastructure is maintained at height to prevent damage during routine maintenance	<input type="checkbox"/> Vegetation around infrastructure is too tall and will be damaged during routine maintenance
		<input type="checkbox"/> Vegetation around infrastructure is maintained at height to prevent damage during routine maintenance			
Long-term Ponding - if failing report to USM with in one week		<input type="checkbox"/> Water drains within 24 hours (100% of swale)	<input type="checkbox"/> Water drains within 24 hours (100% of swale)	<input type="checkbox"/> Water drains within 24 hours for at least 90% of swale bottom	<input type="checkbox"/> Water drains within 24 hours for at least 90% of swale bottom

Overall score for KPI Reporting Form*

**Overall score will be lowest category of check box*